

Office Action Summary

Application No.

10/593,173

Applicant(s)

MATSUI, TOMOTSUGU

Examiner

Karin M. Reichle

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/92)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7-10-09 has been entered except as noted infra.

Specification

Drawings

2. The drawings were received on 7-10-09. These drawings are not approved. The proposed Figures do not overcome all the drawing objections, i.e. the cross-sections, i.e. lines X-X and Y-Y, are still not denoted by Roman or Arabic numerals, e.g. I-I. Also the annotated drawings do not show the changes made to the pending drawings, i.e. those as originally filed. See also the discussion in paragraph 4 infra. Therefore, see the following paragraph and the Response to arguments section infra.

3. The drawings are still objected to because cross-sections should be denoted by Roman or Arabic numerals, not letters. Note also the use of letters to describe such in the textual description. In Figure 1, the lines from 13, 20 and 21 should be dashed to denote underlying structure. Also a line from each denotation to the structure it denotes should be set forth, i.e. no B1 in parenthesis without a line. Corrected drawing sheets in compliance with 37 CFR 1.121(d)

are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Description

4. The amendments to the specification filed 7-10-09 were not entered since the proposed amendments did not show all/identify change locations to currently pending text to arrive at the proposed text, e.g. there is no section subtitle at page 1, line 1, nor at page 6, line 17 as set forth and compare the text of the amendment to page 9, line 24 to that currently pending. Also it is noted that the line spacing of all amendments is not consistent and that such amendments still include grammatical errors. Therefore see the following discussion.

5. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise

and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: page 1, second paragraph.

6. The disclosure is objected to because of the following informalities: 1) The section subtitles should be revised, see 37 CFR 1.77(b). 2) On page 9, second to last line, reference to the inventor should be avoided. 3) The Disclosure of the Invention section, i.e. a description of the claimed invention, and the invention of the claims as now amended should be commensurate, see MPEP 608.01(d) and 1302. However note the following section and discussion infra. 4) Claim 6 now sets forth a water vapor permeable waterproof sheet having first and second portions of relative vapor permeabilities. At the very least, see also discussion in paragraph 8 infra, the description of the sheet and water vapor permeability is unclear/inconsistent throughout the application, e.g. page 4, lines 12-17 and page 5, first full paragraph as filed, as best understood, see preceding paragraph 5, describe a water indicator portion of the article having a first portion of the sheet with a resin thereon and a permeability due to the moisture resistance provided by the resin thereon as compared to the permeability of a second portion of the sheet which is not included as part of the indicator. Appropriate correction is required.

Claim Objections

7. Claims 6-10 are objected to because of the following informalities: in claim 6, line 1, “structured by integrally forming” should be --comprising, in integral formation,-- and on line 3, before “comprising”, --further-- should be inserted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. Claims 6-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims now require an absorbent article structured by integrally forming a liquid permeable top sheet, an absorbent, a water vapor permeable waterproof sheet, and a liquid impermeable back sheet, in this order, and further comprising a hydrophilic resin coating layer coupled with a first portion of the water vapor permeable waterproof sheet and separated from a second portion of the water vapor permeable waterproof sheet, a water vapor permeability of the first portion being lower than a water vapor permeability of the second portion; and an information mark layer coupled with the hydrophilic resin coating layer, claim 6, the length and width of the hydrophilic resin coating layer being greater than the length and width of the information mark layer and the information mark layer and the hydrophilic resin coating layer have a thickness of 1 to 20 micrometers, as best understood, claim 8, and an ink layer disposed between the water vapor permeable waterproof sheet and the hydrophilic resin coating layer which is resistant to discoloration when exposed to water, claim 9. Applicant relies upon various portions of the original application, page 11 of the 7-10-09 remarks. While the original specification teaches an absorbent article structured by integrally forming a liquid permeable top sheet, an absorbent, a water vapor permeable waterproof sheet, and a liquid impermeable back sheet, in this order, characterized in that a water content indicator is provided on an inner surface of the water vapor permeable waterproof sheet, the water content indicator being

constituted by a hydrophilic resin coating layer and an information mark provided on an inner surface of the hydrophilic resin coating, the hydrophilic resin coating layer constituting the water content indicator and the information mark are formed in approximately same shape or the resin coating is wider and longer than the mark and each of the information mark layer and the hydrophilic resin coating layer has a thickness of about 1 to about 20 micrometers, i.e. about 2 to 40 in combination, and the ink layer not being discolored when exposed to water, this is not what is claimed. Furthermore, at the very most, see also discussion in paragraph 6, the application, e.g., page 4, lines 12-17 and page 5, first full paragraph as filed, as best understood, see paragraph 5 supra also, describes a water indicator portion of the article having a first portion of the sheet with a resin thereon and a permeability due to the moisture resistance provided by the resin thereon as compared to the permeability of a second portion of the sheet which is not included as part of the indicator, which is not what is claimed, i.e. “a hydrophilic resin coating layer coupled with a first portion of the water vapor permeable waterproof sheet and separated from a second portion of the water vapor permeable waterproof sheet, a water vapor permeability of the first portion being lower than a water vapor permeability of the second portion”. If Applicant maintains the claim language, the portion of the original specification which provides support for the entire scope of each claim in a single embodiment should be set forth.

Claim Language Interpretation

9. Since no claim terminology has been explicitly defined, such terminology will be given its usual, e.g., dictionary, definition. It is noted the claims do not require direct coupling nor set forth how the second portion and the resin are “separated”. With regard to the

terminology "information mark layer", since this terminology has not explicitly defined such terminology is interpreted to require a layer forming a mark which functions to impart information of some type. With respect to claims 6-10 and the discussion in paragraph 8, see MPEP 2163.06, I. Therefore and due to the lack of clarity set forth in paragraph 6 also, the language of lines 6-7 of claim 6 will be interpreted to require either the claimed sheet with first and second portions of the claimed permeability or as interpreted in light of page 4, lines 12-17 and page 5, first full paragraph as filed, i.e. the combination of the first portion of the sheet with a resin thereon and the second portion of the sheet without the resin thereon of the claimed permeability. With respect to claim 9, the ink print is not required to be coextensive with the information mark. See also discussion *infra*.

Claim Rejections - 35 USC § 102/103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 6 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cammarota et al '119 and thereby, by incorporation, Timmons '211.

Claim 6: See Claim Language Interpretation section *supra* and '119 at the entire document, esp. the Figures and, e.g., col. 1, lines 41-54, col. 2, lines 11 et seq, and thereby, by incorporation, '211 at the col. 2, line 68-col. 3, line 4, col. 3, lines 33-34 and 59-61, col. 4, lines 6-10 and 40-47, col. 5, lines 21-66, and col. 6, lines 19-26, e.g. at least a hydrophilic resin coating layer (Note paragraphs bridging pages 10-12 of the instant application), '119 further at

col. 3, lines 1-4 and 46-51, col. 7, lines 19-29, col. 5, lines 45-50, the paragraph bridging cols. 6-7, col. 8, lines 28-58, col. 9, lines 6-61, especially line 60, col. 11, line 40-col. 12, line 13, col. 12, lines 21-36, col. 15, lines 13-62, and col. 21, lines 26-48, i.e. '119 teaches an absorbent article 20 comprising at least a liquid permeable top/most upper sheet 42, an absorbent 44, a water vapor permeable waterproof sheet, i.e. a more upper sheet of cover 40, e.g. 116, see, e.g., again col. 15, lines 18-23 and col. 15, lines 37-38, and a liquid impermeable back sheet, i.e. a more outer sheet of cover 40, e.g. 114, see, e.g., again col. 15, lines 18-23 and col. 15, lines 37-38, a hydrophilic resin coating layer, see, e.g., portions of '211, esp. col. 5, lines 27-66, at least a portion of the binder, e.g. the binder is a water-soluble, i.e. "hydrophilic" as defined by the dictionary is "Having an affinity for, absorbing, wetting smoothly with tending to combine with, or capable of dissolving in water", polyvinyl alcohol or carboxymethyl cellulose, i.e. CMC, (Note again the instant specification at the paragraph bridging pages 10-11) which is coated/layered on the cover between the absorbent and the water vapor permeable waterproof sheet, e.g. is provided on a portion of an inner surface of the water vapor permeable waterproof sheet, see portions of '119 cited supra, e.g. col. 21, lines 27-48, i.e. coupled, see CLI supra, to a first portion and separated, see CLI, from a second portion, and an information mark, see col. 1, lines 41-45 of '119, i.e. informational graphics, e.g. the "active graphic" tint/dye/ink, see, e.g., Figure 5, element 85, or the "permanent graphic"/"segmentation graphic"/"background color graphic"; see, e.g., Figure 5, element 92 and the cited portions of '119, and the mark is the dye (Note again the paragraph bridging pages 11-12 of the instant application). Claim 9 further requires the mark "coupled" with the resin layer. See Claim Language Interpretation section supra, i.e. the claim does not require direct coupling. See again the cited portions of '119 and

'211, i.e. mix/solution/dispersion of dye/binder, i.e. mix/solution/dispersion of dye in resin, i.e. "coupled to".

Claim 6 now also requires 1) a hydrophilic resin coating layer "coupled" with a first portion of the water vapor permeable waterproof sheet and separated from a second portion of the water vapor permeable waterproof sheet and 2) a water vapor permeability of the first portion being lower than a water vapor permeability of the second portion. With regard to 1), see discussion of resin supra with regard to the sheet, With regard to 2), see CLI, discussion of the resin supra with regard to the sheet and note the coating/layer of resin adds extra thickness to the portion it coats but not to portions it does not coat. Therefore, there is sufficient factual evidence for one to conclude that inherently there is or obviously there is a lower permeability at the coated/first portion than at the uncoated/second portion due to the increased thickness which the vapor needs to permeate through. (Note additionally, e.g., again the cited portions of '119, esp. col. 9, lines 21-25 and 50-61, the paragraph bridging cols. 17-18, col. 21, lines 29-48, esp. lines 33-35, and 46-47, ("permanent graphic"/"segmentation graphic"/"background color graphic" may be on core or between core and vapor permeable layer while "active graphic", i.e. dye/mark/resin/binder, layer can be between the core and vapor permeable layer or on interior surface of vapor permeable layer) and, e.g., at least a portion of 92, i.e. there is sufficient factual evidence for one to conclude that or necessarily and inevitably conclude that the information mark can be on the surface of the absorbent assembly behind the binder/resin on the surface 112, see Figure 9B.)

Claim 9: Claim 9 further requires an ink layer disposed between the hydrophilic resin coating layer and the water vapor permeable waterproof sheet which is resistant to discoloration

when exposed to water. See Claim Language Interpretation section *supra*, i.e. the claim does not require direct provision. See again discussion of claim 6. Therefore, there is sufficient factual evidence for one to conclude that there is or necessarily and inevitably is at least a portion/layer of permanent ink/dye, e.g., at least a portion of 92, e.g. a permanent segmentation graphic, is disposed between at least a portion of the hydrophilic resin/binder which resin/binder is a coating layer and water vapor permeable water proof sheet while at least a portion/layer of the mark/dye is disposed between at least a portion of the hydrophilic resin which resin/binder is a coating layer and the absorbent. Additionally, note, e.g., '119 also contemplates other permanent graphics, e.g. 81, 82, and active graphics, e.g. 89, 88, which can be positioned in various locations as discussed *supra*.

Claim Rejections - 35 USC § 103

12. Claim 8 is rejected under 35 U.S.C. 103(a) as obvious over Cammarota et al '119 and thereby, by incorporation, Timmons '211.

Claim 8: This claim requires the length and width of the hydrophilic resin coating layer be greater than the length and width of the information mark layer and the information mark layer and the hydrophilic resin coating layer have a thickness of 1 to 20 micrometers as best understood, see CLI. While '119 teaches a resin coating layer having a length and width greater than a length and/or width of the information mark layer, i.e. see, the discussion of claims 6 and 9 *supra* as well as, e.g., col. 11, lines 30-32, i.e. "can be" infers also can not be, element 81 or 82 in Figure 3 as compared to 88 and/or 89, it does not teach the claimed thickness. See however the discussion *supra* in paragraphs 8-9 *supra* as well as the paragraphs bridging pages 10-12 of

the instant disclosure, i.e. no criticality of the claimed range for the combination, i.e. of about 1-20. Note again that '119 and '211 recognize the same problem, i.e. moisture indicating, as disclosed and also desire the same properties/combination of properties, e.g. visibility of indication in a limited use/disposable elastic, i.e. not hard, garment, as the instant application. Note also MPEP 2141.05. Therefore, it is the Examiner's second position that even if the prior art does not include the exact thickness range, the general conditions of the claim are disclosed thereby and it is not inventive, i.e. it would be obvious to one of ordinary skill in the art, to discover the optimum or workable ranges, i.e. Applicant's ranges, by routine experimentation, *In re Aller*, 105 USPQ 233 (CCPA 1955).

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cammarota et al '119 and Timmons '211 in view of Ikeda et al '091.

This claim requires the water vapor permeable waterproof sheet be a sheet material in which a water vapor permeability (Note it does not require the entire sheet) is 7000 g/m²/24h as measured according to JIS Z-0208. While '119 at col. 12, lines 32-34 and col. 15, lines 13-62 teaches a vapor permeable waterproof porous polypropylene based resin film/layer it does not teach the specific vapor permeability measured according to the specific test. However see '091 at paragraphs 1, 98, 101 and 111 for example. To make the vapor permeable waterproof porous polypropylene based resin film/layer sheet of '119 an vapor permeable waterproof porous polypropylene based resin film/layer as taught by '091 instead, if not already, would either be obvious, see *In re Siebentritt*, 54 CCPA 1083, i.e. two equivalents are interchangeable for the desired function, express suggestion of desirability not needed to render such substitution obvious, or be obvious to one of ordinary skill in the art in view of the recognition that such a

sheet provides vapor permeability and the desire of such same properties in the cover by '119. In so doing the prior art would necessarily and inevitably teach the claimed article, i.e. the range "2000...or higher" includes 7000, note MPEP 2131.03 and 2144.05.

14. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cammarota et al '119 and Timmons '211 in view of Kolfta et al '904 and Yubuki et al '595.

This claim requires the hydrophilic resin coating layer comprises an ultraviolet absorbents, ultraviolet scattering agent, light stabilizer or antioxidant. While '119 and '211 teach a wetness indicator including a coloring agent and resin/binder such does not teach such having such additives. See, however, e.g., paragraphs 2, 17, 86, 94 and 53-78 of '904 and 80, 26, 45-47 of '595, i.e. resin binder/coloring agent indicators include other additives including ultraviolet agents, stabilizers and antioxidants to enhance storage and/or performance during use, e.g. stabilizing/prevention of degradation of coloring agent. Therefore, to employ an additive, such as, e.g., an ultraviolet absorbent, ultraviolet scattering agent, light stabilizer or antioxidant as taught by '904 and '595 on the '119/'211 device would be obvious to one of ordinary skill in the art in view of the recognition that such would prevent degradation of the indicator, i.e. and thereby during use, and the desire of '119 to provide accurate indication.

Response to Arguments

15. Applicant's remarks have been carefully considered but are either deemed moot in that the issue discussed has not been reraised or deemed not persuasive for the reasons set forth supra. For example, Applicant's remarks are narrower than the disclosure and/or the claim language and/or the teachings of the prior art, see discussion supra.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied art teach various water content indicators.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karin M. Reichle whose telephone number is (571) 272-4936. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karin M. Reichle/
Primary Examiner, Art Unit 3761

September 8, 2009

